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ABSTRACT

A study was conducted to develop an instrument which would require a relatively short time to complete and would predict an adult's probable performance on a five-part General Educational Development (GED) test. It was believed that the cloze procedure (a measure of reading comprehension in which every fifth word is deleted from a reading passage and replaced by a blank line) might be useful in the development of a predictive instrument. A cloze test, which took about 30 minutes to complete and consisted of a 250-word passage written at the 10th grade level, was developed and administered to 148 subjects upon their completion of the GED. Results indicated a significant positive relationship between the cloze test scores and all of the five GED sub-test scores and the total GED test scores. The cloze test was most highly related to, in descending order, the grammar, literary, social studies, natural science, and mathematics sub-tests. To determine the cloze test's predictive validity, another investigation was conducted on 461 students preparing for the GED exam. The direct cloze test-GED relationship was upheld, but it was concluded that other factors, such as sex and race, also affect GED performance. The original study was replicated on 110 people with similar significant relationships demonstrated. (References and a copy of the cloze test used in the study are included.) (LMS)

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Development of An Instrument For Grouping Students Who Are Preparing For The General Educational Development (GED) Test*

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ABSTRACT

The purpose of the study was to develop a relatively short test which would predict GED test scores with reasonable accuracy.

Brant obtained fairly high correlations between the Iowa Tests of Educational Development and the GED ($r = .67$ to $r = .78$). The Iowa tests, however, require ten hours to complete. A shorter test which is as effective would be more efficient as a predictor of GED performance.

A test was constructed according to the cloze procedure. 148 subjects completed the cloze test at GED testing sites immediately after they had completed the five GED sub-tests.

The correlations between cloze test scores and GED sub-test scores, which were all highly significant, ranged from .56 for the Mathematics sub-test to .73 for the Grammar sub-test. Results from regression analyses, in which the cloze score was the independent variable, were used to construct prediction equations. From these equations, criteria cloze scores were identified to be used to group students with respect to their probable GED performance. These findings were confirmed in a replication study performed with 110 subjects.

The cloze test, which takes ten to thirty minutes to complete, has a KR-20 reliability of .84. The test was shown to have sufficient predictive validity to warrant its use in GED preparation programs.

Further research should make GED predictive tests constructed according to the cloze procedure more effective by using passages written at a lower grade level.

STATEMENT OF THE PROBLEM

Traditionally, the high school diploma has been viewed by many Americans as a valuable stepping stone towards occupational success and economic security. However, there are over 57 million adults aged 16 and older who do not have a high school diploma and are not now enrolled in school (11). For those people who would like to have the diploma, but who are not willing or able to participate in high school diploma programs for adults, the State Departments of Education offer a high school equivalency certificate. In order to obtain the certificate, an adult must pass the General Educational Development (GED) test. In 1974, one-half million adults took this test (6).

The City Colleges of Chicago provide basic education for 38,000 adults with the express purpose of counselling students and preparing them to pass the GED test. The teachers in these GED preparation classes are faced with the problem of quickly assessing a student's ability to perform on the GED test. The test which is most widely used at the present time to measure students' abilities, the Iowa Test of Educational Development, is inefficient because of the amount of time required to administer it. Because this testing procedure is too time consuming to be practical and acceptable to students, in most cases no systematic assessment of the students' abilities is made. As a result, adults with widely differing abilities are offered identical instruction in the basic educa-

tion classes of the City Colleges.

The purpose of this research, then, was to develop an instrument that would require a relatively short time to complete, and which would predict an adult's probable performance on the GED test. This predictive instrument would provide information to teachers and administrators which could help basic education programs to be more efficient and effective.

REVIEW OF THE LITERATURE

This investigator found two studies which have used the Iowa Test of Educational Development (ITED) to predict scores on the GED test (4,8). Morgan (8) found correlations ranging from .67 to .78 between ITED sub-tests and the related subject matter tests on the GED. Brant, continuing Morgan's work, proposed that:

> Since performance on the corresponding sub-tests of the ITED and the GED correlate positively and well...a specific score on a sub-test of the ITED can be used to predict a specific score on a corresponding subject area test in the GED battery. (4:23)

While this is an effective way of predicting a student's performance on the GED test, it is not particularly efficient. Administration of the Iowa test battery is a lengthy procedure since the test manual recommends that the student be allowed ten hours to complete the battery. A more efficient, yet equally effective, instrument is necessary in order that the measurement of students' abilities be carried out in a practical way in GED preparation programs.

Robinson (9) has suggested the use of tests based on the cloze procedure as a potential solution to the problems encountered in the measurement of adults' reading abilities. Since reading comprehension ability is an important factor in performance on the GED, it was believed that the cloze procedure might be useful in the development of a predictive instrument for the GED test.[1]

DEFINITIONS

The cloze test is a measure of reading comprehension (2). According to the cloze procedure, every fifth word is deleted from a passage of reading material and replaced by a blank line of a standard length. The testee is instructed to fill in each blank line with the word which he believes was deleted. In a 250 word passage, there would be 50 blank lines which the testee would be expected to fill in. The greater the number of correct responses, the greater is an individual's ability to perform reading comprehension tasks.

The General Education Development (GED) test is used by all 50 states as a basis upon which to grant high school completion credentials to adults. The GED test which has been used since 1942 has been taken by millions of adults since that time. It is composed of five sub-tests, each of which is to be completed within two hours. The tests are:

1. Correctness and Effectiveness of Expression (Grammar)
2. Interpretation of Reading Materials in the Social Studies (Social Studies)
3. Interpretation of Reading Materials in the Natural Sciences (Natural Science)

[1] This hypothesis was suggested to the author by Dr. William Page, Assistant Professor, Department of Education, University of Chicago

4. Interpretation of Literary Materials (Literary)

5. General Mathematical Ability (Mathematics)

The test developers recognize that reading comprehension is a skill which is necessary to perform well on at least sub-tests 2, 3, and 4 of the GED (7).

The Iowa Test of Educational Development (ITED) is an achievement test designed to measure individuals' ability to "apply broad concepts and generalized skills to situations not previously encountered in the classroom" (4:3-4). Five of its sub-tests, each of which is to be completed in one hour, correspond to the subject area sub-tests on the GED. These sub-tests are:

1. Correctness and Appropriateness of Expression
2. Ability to Interpret Reading Materials in the Social Studies
3. Ability to Interpret Reading Materials in the Natural Sciences
4. Ability to Interpret Literary Materials
5. Ability to Do Quantitative Thinking

In addition to the correspondence between the titles of the sub-tests on the ITED and the GED, it has been noted that there are many common elements in the content of the two tests (4).

HYPOTHESIS

At least three of the GED tests appear to be primarily tests of reading comprehension, while the other two, Grammar and Mathematics, require at least a minimum level of reading ability. Since the cloze test has been shown to be a measure of reading

comprehension, it was hypothesized that there would be a significant positive correlation between performance on the cloze test and on the GED tests.

Since GED sub-tests 2, 3, and 4 require the comprehension of reading passages, it was predicted that scores on these three sub-tests would be more highly related to the cloze test scores than would the scores on sub-tests 1 and 5. Since sub-test 1 appears to require fewer reading skills than do sub-tests 2, 3, and 4, correspondingly its scores should be correlated with cloze scores to a lesser degree, while computation skills are the main emphases of sub-test 5, and so its scores should be least highly correlated with cloze test scores.

DESIGN OF THE STUDY

In order to test the hypothesis, a cloze test was developed as subsequently described, and administered to 148 subjects upon their completion of the GED. Regression techniques were used to analyze the data, in which scores on the cloze test served as the independent variable, and scores on the GED tests, the dependent variables. The first part of the analysis determined the relationship between scores on both the cloze test and the five GED tests simultaneously using multivariate procedures. The second part of the analysis determined the relationship between scores on the cloze test and those of the total GED test.

Instrumentation

To construct the cloze test, a passage of 250 words was written at the tenth grade level as determined by the reada-

bility formula given by Bormuth (1:85). Every fifth word was deleted and replaced by a line of fifteen blank spaces (See Appendix). The individuals taking the test were instructed to replace the deleted words. Although the cloze test was untimed, almost all of the subjects completed the test within ten to thirty minutes.

Scoring of all of the responses was based on the exact replication of the original text. Incorrect spelling of the correct responses was accepted. Since this procedure eliminates, almost entirely, any judgement in the scoring of the test, the cloze test is an objective measurement instrument.

The reliability of the cloze test as calculated by the Kuder-Richardson 20 formula is .84. This level of reliability is within the range reported for cloze tests by Bormuth (3), .76 to .94, Ruddell (10), .85, and Gallant (5), .90.

Subjects

Subjects were recruited during the time that the GED test was being administered by the GED testing office of the Cook County Educational Service Region in Illinois. The recruitment of subjects occurred at six separate GED testing sites during May and June of 1975. Four testing sites were in the City of Chicago and two were in suburban Cook County.

Subjects for this study were obtained in the following manner. Immediately preceding the administration of the GED test, the purpose of this research was explained to the testees.

These testees were asked to volunteer no more than one hour of their time after they had completed the GED to participate in this study by completing the cloze test.

Approximately 20 percent of those who were asked to participate in the study by completing the cloze test actually did so. Of the 148 people who completed both the GED test and the cloze test, 104, 70 percent, were women. Data concerning subjects' race, age, years of school completed, and type of preparation were not collected since, at the time, the investigator did not consider those characteristics as useful information. Thus, there is only a small amount of information with which to characterize this population. It may be useful to observe that an equal proportion of urban and suburban residents participated in the study. In this group of 148 adults, 66.4 percent passed the GED test. In comparison, 69.1 percent of the national population of GED testees passed in 1974 (6).

RESULTS AND DISCUSSION

The results from the regression analyses using the cloze test score as the independent variable, and the GED sub-tests and total GED test scores as the dependent variables, are shown in table 1.

The results shown in the table indicate that there is a significant positive relationship between the cloze test scores and all of the GED sub-test scores and the total GED test scores. The cloze test is most highly related to, in descending order, the Grammar, Literary, Social Studies, Natural Science, and

Mathematics sub-tests. It is also highly related to the total GED test. The cloze test scores account for 50 percent of the variance in the total GED test scores.

TABLE 1

SUMMARY OF THE REGRESSION ANALYSES USING THE CLOZE AND GED TESTS

GED test	Percent of variance explained	Multiple r	F	p<
Grammar	55	.74	178	.0001
Literary	42	.65	109	.0001
Social Studies	42	.64	106	.0001
Natural Science	35	.59	80	.0001
Mathematics	31	.55	67	.0001
Total	50	.71	153	.0001

As expected, the Mathematics sub-test was least highly related to the cloze test. Also as expected, the three reading sub-tests had approximately the same relationship with the cloze test. The results, however did not bear out the expected relationship between the Grammar sub-test and the cloze test, since this sub-test was more highly correlated to the cloze test than were the Social Studies, Natural Science, and Literary sub-tests. This unexpected result may be explained using the following reasoning. Whereas the cloze test is a general measure of reading comprehension, each of the different types of content in sub-tests 2, 3, and 4 requires a somewhat different set of comprehension skills. However, sub-test 1, which does not involve any particular content area

apart from grammar, is a more direct measure of reading comprehension. Based on the evidence presented here, it may be concluded that the Grammar sub-test measures basic skills which are also measured by the three reading sub-tests.

Based on the regression analyses, a prediction table was constructed which attaches a probability to the achievement of a criterion score on the GED tests given a selected cloze score. The criteria scores used to derive this table were 225 for the total GED test and 45 for each individual GED test. These two scores were selected since, in most states, an adult must achieve a score of 225 to pass the total GED test. Thus, an average score of 45 is needed on each sub-test to obtain a total score of 225. The prediction equation for each test and for the total GED test is the one for a straight line:

$$Y = A + BX$$

where Y = a predicted GED test score,

A = a constant,

B = a regression weight, and

X = a cloze score.

The equations for the five sub-tests and the total GED test are given in table 2.

TABLE 2

REGRESSION EQUATIONS AND STANDARD ERRORS OF THE ESTIMATE FOR THE CLOZE TEST (X) AND THE GED TESTS (Y)

GED test	Prediction Equation	Standard error of the estimate
Grammar	y = 25.6 + 1.02(x)	5.60
Social Studies	y = 29.9 + 1.00(x)	7.05
Natural Science	y = 34.0 + .79(x)	6.42
Literary	y = 32.8 + .80(x)	5.62
Mathematics	y = 29.0 + .67(x)	5.95
Total	y =153.5 + 4.20(x)	24.81

The entries of the prediction table (Table 3) were determined by finding the proportion of GED scores which would be expected to exceed the criteria, given selected cloze scores. This was done for each of the five sub-tests and the total GED test. The procedure used to determine these proportions rests on the assumption which is made for all linear regression models, that the predicted GED score is the mean of a population corresponding to a selected cloze score. For each prediction equations given in table 2, the criteria scores of 45 and 225 were converted into Z-scores according to the formula:

$$Z = \frac{y - y'}{S}$$

where y = the criteria: 45 for the sub-tests and 225 for the total test,

y' = the predicted value of the GED score given a cloze score, and

s = the standard error of the estimate.

The Z-scores correspond to areas under the normal curve which can be found by consulting a cumulative normal probability

table. These areas are interpreted as the proportion of people expected to achieve the GED criteria scores given a cloze score. Table 3 presents these results for selected cloze test scores.

TABLE 3

PROBABILITY OF ACHIEVING THE CRITERION GED TEST SCORE BASED ON A CLOZE TEST SCORE

GED test	Cloze test score associated with the probability of achieving the GED criteria scores				
	2%	15%[a]	50%[b]	85%[c]	98%
Grammar	8	13	19	25	30
Social Studies	0	7	15	23	30
Natural Science	0	5	14	22	31
Literary	1	8	15	23	30
Mathematics	6	15	24	34	42
Total	5	11	17	23	29

a,b,c. These six probabilities range from 13% to 16%, from 50% to 52%, and from 84% to 87%, respectively. One value for each list was chosen in order to avoid the use of multiple tables.

In many instances a teacher would use a cloze score to judge an individual's probability of passing a sub-test or the total GED test. In those instances, it would be useful to know the accuracy of the prediction for the individual. Of the 148 adults in this study, 80 percent of those who had at least a 50 percent probability of passing the GED actually passed, and 80 percent of those who had less than a 50 percent probability of passing the GED actually failed. This error rate of 20 percent for predicting a student's performance on the GED is

sufficiently low so that teachers can use the cloze scores to make reliable estimates for individual students.

PREDICTIVE VALIDITY OF THE CLOZE TEST

The cloze test was used in a subsequent investigation, one of the purposes of which was to determine the test's predictive validity.

The cloze test was administered at the time that people registered for a GED preparation course, the central aspect of which was televised instruction. The course, which lasted for eighteen weeks, was offered by the City Colleges of Chicago.

During the two weeks following the end of instruction, 461 students, 14 percent of the original course registrants, completed the GED test. These people, who were all residents of Chicago, had completed an average of 9.7 years of school, and were, on the average, 32 years of age. Eighty percent were women, and their racial composition was 60 percent Black, 23 percent White, 4 percent Spanish, and 13 percent "other."

Table 4 divides these students into four groups using the cloze test scores identified in table 3. The number and percentage passing in each group is shown below.

TABLE 4

NUMBER AND PERCENTAGE IN EACH CLOZE GROUP WHO PASSED THE TOTAL GED TEST

Cloze score	Number who completed five GED sub-tests	Passing	
		Number	Percentage
0-11	45	5	11.1
12-16	86	16	18.6
17-22	167	63	37.3
23-50	163	122	70.5
Total	461	206	44.6

As table 4 shows, only the lowest group performed as had been predicted in table 3. The lowest group should have had a 15 percent or less probability of passing the GED. The three highest groups, however, performed less well than predicted in table 3. Whereas the third highest group should have had between a 20 percent and a 43 percent probability of passing the GED test, only 19 percent passed. In the second highest group, which was predicted to have had between a 50 percent and a 80 percent chance of passing, 37 percent passed the GED. In the highest group, which was predicted to have had at least a 85 percent chance of passing the test, only 70 percent passed.

To explain these discrepencies, it is reasonable to argue that there are factors other than those measured by the cloze test, such as sex and race, which affect GED performance. It may have been that these factors were present to a greater extent in one population than in the other, thereby affecting the predicted passing rates. Except for their sexual composition, the data are not available with which to compare the two populations.

However, it was shown for the population who prepared by television that race had an effect on GED performance which was independent of the effect of cloze test score. That is, Whites performed better on the GED than the remaining three racial groups, even in the cases where all four groups had the same cloze test score. Although the racial composition of the original norming population is not known, it was observed that it contained more Whites than the population who prepared by tel-

evision. Therefore, it is reasonable to argue that to the extent that each of the four cloze groups in the population which prepared by television contained a lesser percentage of whites than the original norming population, the percentage of people passing in that cloze group would be less than predicted by table 3.

Although the results deviate to a certain extent from those which were expected, the direct linear relationship of cloze test performance the GED test performance was upheld. It is concluded that the cloze test has sufficient predictive validity to warrant its use in GED preparation classes. However, to the extent that other factors are found to significantly influence the performance of their students on the GED test, it would be necessary for teachers to develop a schema different from the one given in table 3 by which to group cloze test scores. This would enable teachers to use this test most effectively in their classrooms.

REPLICATION OF THE ORIGINAL STUDY

In order to confirm the findings of the original study, that study was replicated. Subjects were recruited during the time that the GED test was being administered by the GED testing office of the Cook County Educational Service Region in Illinois. The recruitment of subjects occured at one GED testing site in the City of Chicago during October of 1976.

Subjects were recruited in the following manner. Immediately preceeding the administration of the GED test, the purpose of this research was explained to the testees. These testees

were asked to participate in this study by completing the cloze test after they had completed the GED. About 95 percent of those who were asked to participate in the study actually did so.

One hundred and ten people, all of whom were residents of Chicago, completed both the GED test and the cloze test. This group had the following demographic characterisitics: 81 percent were women; average age, 32 years; average years of school completed, 9.8; and 45 percent were Black, 39 percent were White, and 16 percent were of "other" races. All of these people had completed a GED preparation course, the central aspect of which was televised instruction, within two weeks preceeding their participation in this study. Fifty-two percent of these 110 people passed the GED test.

The same statistical techniques as used in the original study were used to analyze these data. Regression techniques were used in which scores on the cloze test served as the independent variable, and scores on the GED tests, the dependent variables. The relationships between the cloze scores and the scores on the five GED sub-tests and the total GED test were highly significant ($p < .0001$). The correlation between scores on the cloze test and the GED tests were: total GED, .73; Grammar, .70; Literary, .69; Social Studies, .65; Natural Science, .64; and Mathematics, .52. These values are comparable to the ones given in table 1. It may be concluded that the relationships between scores on the cloze test and the GED tests in the original and the replication studies are very similar.

Based on the regression analyses, a prediction table (table 5) was constructed which attaches a probability to the achievement of a criterion score on the GED tests given a selected cloze score. The criteria scores used to derive this table were 225 for the total GED test and 45 for each GED sub-test. The procedures used to derive this table are described earlier in this paper.

Table 5

Probability of Achieving the Criterion GED Test Score Based on a Cloze Test Score

GED Test	Cloze test score associated with the probability of achieving the GED criteria scores				
	2%	15%[a]	50%[b]	85%[c]	98%
Grammar	5	13	20	27	34
Social Studies	4	12	20	28	36
Natural Science	0	8	16	24	32
Literary Materials	4	11	18	25	32
Mathematics	4	15	26	37	48
Total	6	13	19	26	32

a,b,c, These six probabilities range from 14% to 16%, from 48% to 53%, and from 74% to 87%, respectively. One value for each list was chosen in order to avoid the use of multiple tables.

The values in this table are comparable to the ones given in table 3. In comparing the results in table 3 and table 5, the estimates of cloze scores associated with specified probabilities of achieving GED criteria scores are shown to be quite stable. Since the only substantive difference between the methodology of the

two studies was the population of subjects, the discrepencies between the values of tables 3 and 5 are most likely to be attributable to that factor. It can be concluded that this cloze test is a valid instrument for predicting performance on the GED test.

SUMMARY AND IMPLICATIONS

Institutions whose responsibility is to prepare adults to pass the GED test lack an efficient method by which to predict their students' probable performance on the GED. It was found in this study that a test based on the cloze procedure predicts, with reasonable accuracy, scores on the GED test. In addition, most adults can be expected to complete the cloze test in less than thirty minutes. From the perspective of teachers and administrators who would use the test, this is a valuable test characteristic.

In using the cloze test in place of the ITED, there is a gain in the efficiency of predicting GED performance. There are, however, two functions which the ITED performs for which the cloze test is less useful. First, since the ITED is similar in content and form to the GED, it can be used as a practice test for the GED. Second, an individual's competence in the sub-skills required to perform well on the GED can be measured by the ITED. In choosing between these two tests, a teacher should consider that the ITED can perform several functions simultaneously, while the cloze test can perform one of those functions, prediction of GED test performance, in a greatly reduced amount of time.

It is likely that this particular cloze test, which is written at the tenth grade level, is more difficult than is needed, and thus does not provide maximum discrimination of the abilites to perform on the GED. The cloze test would discriminate best if a score of about 25 on the test gave one a 50 percent chance of passing the GED. A test in which the norming population obtained a mean score of 50 percent correct, in this case 25 items, would be most likely to contain the greatest number of discriminative items. Therefore, if another cloze test were to be developed, it shoud be written at about the eighth grade level so that a score of about 25 indicates a 50 percent probability of passing the GED.

Tests constructed according to the cloze procedure can be used in any adult literacy program in which the assessment of reading ability is desired.

REFERENCES

1. Bormuth, John. "The Cloze Procedure." In Help for the Reading Teacher. Edited by William D. Page, Urbana, Illinois: ERIC Clearinghouse on Reading and Communication, 1975, 60-90.

2. Bormuth, John. "Factor Validity of Cloze Tests as Measures of Reading Comprehension Ability." Reading Research Quarterly 4 (Spring, 1969): 358-367.

3. Bormuth, John, and MacDonald O.L. "Cloze Tests as a Measure of Ability to Detect Literary Style." In Reading and Inquiry, International Reading Association Conferance Proceedings, 1965, 287-290.

4. Brant, Elaine. "Deriving and Using a Table of GED Scores Expected from Specific ITED Scores and Some Ancillary Forms for ABCE Students." Paper presented at the Adult Education Research Conference, St. Louis, Mo., April 18, 1975.

5. Gallant, R. "Use of Cloze Tests as a Measure of Readability in the Primary Grades." In Reading and Inquiry, International Reading Association Conference Proceedings, 1965, 286-287.

6 GED Testing Service of the American Council on Education, GED Annual Statistical Report, 1974, Washington, D.C.: American Council on Education, 1975.

7. Lindquist, Edward. Transactions and Proceedings of the National Association of State Universities 42 (April, 1944): 68-84.

8. Morgan, Luther. "Predicting Success on the General Educational Development Tests by Using the Iowa Tests of Educational Development." M.A. thesis, University of Minnesota, 1969.

9. Robinson, Richard. "The Cloze Procedure: A New Tool for Adult Education." Adult Education 23 (Winter, 1973): 87-99.

10. Ruddell, R. B. "The Effect of Oral and Written Patterns of Language Structure on Reading Comprehension." Reading Teacher 18 (January, 1965): 270-275.

11. U.S. Bureau of the Census, Statistical Abstract of the United States: 1973. Washington, D.C.: U.S. Government Printing Office, 1974.

Appendix

Cloze Test Used In This Investigation

The GED test was developed in 1945 to aid World War II veterans who wanted to enroll in college but could not do so because their education had been interrupted and they lacked a high school diploma. Since that time, the GED has become an alternate route to a high school credential for adults who have not been able to finish a traditional high school program.

The passing score is 225 points with the additional requirement that a minimum of 35 points be obtained in each of the five subject areas. Oftentimes, the adult student believes that if he can satisfy these requirements then his problems are over. This is not necessarily so. If one wishes to obtain the GED because it is a job requirement, passing the test at a minimum level is sufficient. In this case, the requirement of having a GED certificate tells an employer that the adult has the initiative, ambition, and discipline to go after a degree as an adult and actually complete the task.

On the other hand, a college or vocational

school requires a GED certificate as an entry requirement for a different set of reasons. The assumption in these cases is that the GED measures the ability of a student to read, comprehend, infer, and compute at a level necessary to function in that school's curriculum. This means that passing the GED at the minimum level may not be sufficient to insure that the student will be able to do college level work.